DOCUMENT RESUME

ED 035 894 CG 004 632

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TITLE IMPACT OF TESTING ON STUDENT DEVELOPMENT.
INSTITUTION MICHIGAN UNIV., ANN ARBOR. BUREAU OF SCHOOL SERVICES.
PUB DATE 5 MAR 69
NOTE 24P.; PAPERS WERE PRESENTED AT THE MICHIGAN SCHOOL TESTING CONFERENCE, THE UNIVERSITY OF MICHIGAN, ANN ARBOR, MICHIGAN, MARCH 5, 1969

EDRS PRICE EDRS PRICE MF-$0.25 HC-$1.30
DESCRIPTORS *ADMINISTRATION, *COUNSELING, DEVELOPMENTAL GUIDANCE, EDUCATIONAL IMPROVEMENT, EDUCATIONAL OBJECTIVES, EDUCATIONAL QUALITY, EVALUATION, GUIDANCE, *INSTRUCTION, *STUDENT DEVELOPMENT, STUDENT EVALUATION, STUDENT IMPROVEMENT, TEACHER IMPROVEMENT, TEST CONSTRUCTION, *TESTS

ABSTRACT

THE IMPACT OF TESTING ON STUDENT DEVELOPMENT, ADMINISTRATION, COUNSELING, AND INSTRUCTION IS CONSIDERED. ALTHOUGH IN THE PAST, TESTING HAS NOT HAD MANY CONSTRUCTIVE EFFECTS ON STUDENT DEVELOPMENT, FUTURE TESTS WILL SEEK TO DISCOVER EARLY INDICATIONS OF POTENTIAL THAT CAN BE DEVELOPED AND UTILIZED. TESTS HAVE BEEN USED ADMINISTRATIVELY AS A TOOL FOR ATTACKING EDUCATIONAL SYSTEMS, BUT THEIR USE MUST BE REDIRECTED SO THAT THEY BECOME A MORE INTEGRAL PART OF EDUCATION AND A MEANS TO EVALUATE AND IMPROVE OUR TOTAL EDUCATIONAL PROGRAM. THE IMPACT OF TESTING ON COUNSELING IS UNCLEAR, AND CONSEQUENTLY IT IS MORE REALISTIC TO CONSIDER THE INTERPLAY BETWEEN THE TWO. TESTS SHOULD BE USED TO OBTAIN PRE-COUNSELING DIAGNOSTIC INFORMATION, INFORMATION FOR THE COUNSELING PROCESS, AND INFORMATION FOR POST-COUNSELING DECISIONS. IN REGARD TO INSTRUCTION, TOO MUCH EMPHASIS HAS BEEN PLACED ON EVALUATING THE PUPIL AND NOT ENOUGH EMPHASIS ON EVALUATING THE TEACHER'S INSTRUCTIONAL PROCEDURE. IF USED EFFECTIVELY, TESTS CAN HAVE A POSITIVE IMPACT UPON INSTRUCTION BY HELPING DEFINE EDUCATIONAL OBJECTIVES, IMPROVING TEACHING AND LEARNING, AND MOTIVATING BOTH PUPIL AND TEACHER TO OBTAIN MAXIMAL BENEFITS FROM THE LEARNING EXPERIENCE. (PSM)

CG004 632 Conference Programs ED035894

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IMPACT OF TESTING ON STUDENT DEVELOPMENT

Addresses Delivered at the
Michigan School Testing Conference
Rackham Building, The University of Michigan
Ann Arbor, Michigan
March 5, 1969

Sponsored by The University of Michigan
Bureau of School Services
with the cooperation of
The University Extension Service

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IMPACT OF TESTING ON STUDENT DEVELOPMENT

RALPH W. TYLER, *Director Emeritus*

Center for Advanced Study in the Behavioral Sciences

Based on the way in which testing has been used in the past, we have evidence of its effects on the student. When testing is used as a basis for grading, students who have confidence that they can achieve what teachers expect of them are stimulated to study more carefully and to devote more time to study when they know they are to be tested. Students who lack this confidence are commonly threatened by testing and they feel harassed and frustrated rather than being positively motivated in their educational endeavors.

The kinds of tests used in the past and their content have also been shown to influence the direction of the efforts of teachers and students. This often means that the tests define objectives and content of subjects rather than the school's course of study when they are different.

Because tests in the past have largely been treated as means for appraising relative performance, many students have viewed their use as the means of "scoring" their educational achievements and the attainments of their class in a competitive game. In some cases this results in emotional tensions that they find difficult to handle.

Because tests are usually produced outside the student's own classroom, some students feel that they have an additional opportunity to show what they can do in cases where they feel the teacher or the school is unfair to them. The use of objective tests, for example, has increased the opportunities for youth from "unknown" schools and often from "unknown" backgrounds to obtain college admission.

Testing has also influenced the educational plans and, to some extent, the career plans of some students from working class families. In these cases test results have guided decisions about enrollment in courses and curricula, and post-high school education. To a lesser extent, occupational career plans have been shifted on the basis of test results.

The evidence we have about the impact of testing on student development in the past does not furnish an impressive positive picture. Much of this can be attributed to the limited conceptions that have guided the construction and use of tests in the past. In a society in which most people are unskilled laborers, only a few are needed for the occupational, social and political elite. The schools then are largely sorting and selecting agents rather than educational. Tests are employed to sort people for courses, curricular tracks, admission to college and the like. They are

designed to measure individual differences and relative performance of groups, not to appraise individual and group progress in learning.

Now, however, our society has become so-called "post-industrial." Only 5 per cent of the labor force is unskilled. Opportunities for employment in technical, professional, managerial and service occupations have increased more than 300 per cent in one generation. Our society is now seeking to identify potential talents of many sorts and to furnish opportunities for these talents to be actualized through education. Research on the brain and in behavioral genetics indicates that the learning requirements in our schools and colleges place no strain on the basic potential of the vast majority of human beings. Schools can be encouraged to help all students learn rather than to serve primarily as a screening and sorting institution. From the standpoint of an individual student, the criterion of an educational institution is one in which the student gains a wider range of alternatives in his life choices with each increment of education. He is aided to find new doors of opportunity rather than being trained ever more narrowly to fit into a niche in society. In this new context, testing can serve in various ways in promoting and guiding the development of the student.

The identification of potential talents as well as needs and opportunities for further education is becoming the function of tests that have previously been focused on the appraisal of so-called "intelligence" or "aptitude." The new tests will seek to indicate a wide range of human behavior that can be developed and constructively utilized in "post-industrial" society, including various intellectual, social and physical types of behavior as well as artistic, emotional and other "expressive" forms. Since the tests will seek not to select out a few but to discover the early indications of potential in most students, the test exercises will include examples of early, relatively untutored reactions, and furnish "work-samples" of these forms of behavior at a number of levels of development. The "scoring" and interpretation will enable the individual student, his parents, teachers and guidance personnel to recognize a variety of alternatives open for the student in his continuing development. Increasingly, educational programs will be designed to enable the student to build on potentials thus identified, programs that permit continuing educational progress as the student gains increased competence through earlier experiences.

In seeking to contribute to the individual's career development, the student will be able to explore occupational and related educational possibilities both through simulated situations and work experience. The earlier tests for occupational aptitude are being replaced by "work

samples," which furnish opportunities for individual assessment and further educational planning.

In the educational programs of schools and colleges, the new kinds of testing designed for our contemporary society will include:

1. Placement tests that help the student identify the extent of his progress in each area of instruction and thus to indicate in what section of a sequential program he can begin his learning so that he can learn things he has not already attained and in which his present background should afford an adequate basis for further study.

2. Diagnostic tests which are based on "work samples" of learning exercises that utilize various appropriate modes of presentation, of problem-solving, of practicing as well as various sensory modalities. These tests should help the student to select, at least initially, the means of learning what he will likely find most effective in his own development in the course.

3. Mastery tests that sample the student's comprehension of basic concepts and ability to utilize the essential skills that are required to proceed to the next unit in the sequential educational program. The purpose of such tests is to identify the readiness of the student to move on in his educational development and not to place him on a scale with relation to his peers. All or nearly all students will attain the level of essential mastery, otherwise the educational program is inappropriate for the students enrolled. The exercises will not be concentrated at the 50 per cent level of difficulty as those in current achievements tests are, but each exercise will be a sample of the desired behavior at the level in which it is commonly used. Every student is expected to perform satisfactorily practically all the exercises as an indication of mastery. In present experimental and developmental programs, "practically all" is defined as 85 per cent of them. Such mastery tests enable the student to recognize when he is ready to move on to the next unit or set of educational experiences.

4. Tests of generalization that enable the student to determine the extent to which he is able to apply what he has learned in the educational program to the many other situations in his life in which this learning is relevant. These tests will consist of exercises that have not been used in his training but represent new illustrations of the concepts and skills he has been seeking to master. The tests will include not only simulation and "descriptions of situations" but also actual samples of the situations in other courses, on the playground and in the wider community where the learning has significant application. The purpose of education is to enable the student to gain the competencies required to develop throughout life,

not simply to get along in school; hence, the need for the student to appraise his effectiveness in using what he is learning.

As schools and colleges seek to become more effective educational institutions, they will require some additional kinds of tests. For example, the school or college administration will need tests to aid in monitoring the ongoing educational program to identify places where problems are arising. Curriculum and instructional research development personnel will need tests to help in assessing the effectiveness of instructional programs, procedures and materials. Policy-makers and the interested public need tests to assist in furnishing information about the progress of education in the nation and the problems being faced.

However, from the standpoint of the development of the student the kinds of testing likely to have the greatest constructive impact are those that:

1. Help the student identify his potential talents as well as needs and opportunities for further education.
2. Aid the student in exploring occupational and related educational possibilities.
3. Assist him in identifying the extent of his progress in an educational institution and help him to find an appropriate place to continue his education.
4. Help him find the ways in which he can most effectively learn what he is seeking to learn.
5. Aid him in determining when he has gained the necessary mastery of a preceding phase in order to proceed to the next phase of the learning sequence.
6. Enable him to find out the extent to which he can use what he has learned in the educational program.

The emphasis now is on the use of techniques and instruments that enable the student to explore himself and his resources to become increasingly able to guide and manage his own education and his own life. Tests and their results can be a helpful resource for him.

IMPACT OF TESTING ON ADMINISTRATION

NORMAN DRACHLER, *Superintendent*

Detroit Public Schools

When I received today's program and saw the list of participants, I wondered what a lay educator was doing among a group of experts in the field of testing. I was even prompted to change the title from "Impact of Testing on Administration" to "Impact of Testing on Administrators". Although the debate on the value of present testing is not fully concluded, the impact of testing on the large city school administrator is fully documented. It can be said unequivocally that present day testing does not add to the life expectancy of any administrator in a large city.

As I read Dr. Tyler's refreshing, challenging and meaningful presentation for the re-direction and new use of tests, I wondered how much of this will happen during my lifetime as a superintendent. Changes in American education take so long and, unfortunately, administrators in large cities are forced to spend more time to develop strategies for survival than measures for improvement.

In a recent address at Cornell University, John Gardner said:

> The only error of the mid-twentieth century . . . was to release aspirations without designing institutions responsive enough to satisfy these aspirations.

I recognize the many strengths and weaknesses in American public education throughout its development—and I admit that these still exist today. I say this not defensively, but only since some of today's critics regard current shortcomings as if these are recent phenomena. One could present a case that public schools are doing better today than they did 50 or 100 years ago, but the fact still remains that then and now education has not fulfilled its responsibilities. Today, however, our current social, industrial and economic forces demand almost immediate and massive reconstruction of public education. A high school diploma is not an optional matter as it was fifty years ago.

Today's tragedy is that research showing the relation of poor education to poverty is not new. Nearly 200 years ago when the American Philosophical Society held a contest on the needs of American education, Robert Coram, of Delaware, wrote:

> . . . it is a shame, a scandal to civilized society, that part only of the citizens should be sent to colleges and universities to learn to cheat the rest of their liberties.

In that same year, 1786, Benjamin Rush in presenting his plans for a national education, wrote:

> We suffer so much from traditional error of various kinds, in education, morals, and government, that I have been led to wish that it were possible for us to have schools established in the United States for teaching the art of forgetting. I think three-fourths of all our school masters, divines and legislators would profit very much by spending two or three years in such useful institutions.

The national report on city slums in 1901, Robert Hunter's famous report on poverty in 1904, and even the recent Kerner Commission report, all reveal that these pleadings fell upon the deaf ears of educators and society.

Even during the 1920's when John Dewey and William Bagley were debating the purpose of testing, it was obvious that their followers did not agree upon the common grounds which both of these men expressed. Dewey proposed:

> Democracy will not be democracy until education makes its chief concern to release distinctive aptitudes in art, thought and companionship.

Insofar as tests assisted this goal, he said, they could serve the cause of progress: however, insofar as they tended, in the name of science, to sort individuals into numerical classes, they were essentially contrary to democratic social policy. Bagley, in his series of essays during the same period said that the only function of tests was to tell the educator where he began: it was the educator's vision—and society—that ultimately set the goals. Yet, despite these warnings, large cities are now confronted with the ogre of national norms. I challenge the best public relations firm in the United States to explain and convince a group of dissenting parents why with a national norm as a criterion, no matter how well youngsters achieved, 49 per cent of the children will still have to be below the national norm. In middle class neighborhoods, the Achilles' heel for testing becomes the annual announcement in the press of the Merit Scholarship winners for each high school in our city. This annual announcement I refer to as the Dow Jones educational average for middle class communities. As soon as the list is announced, parents compare the number of winners in their neighborhood high school with those who won a year ago and the discussion begins in each home whether to sell or to hold out.

Educators must of course assume a substantial share of the criticism directed against public education. Yet a major share of that criticism rests with the American people—the intellectuals, the universities and the business community and others who for over a century have neglected public education. Schools today are being asked to compensate not only for their own failures, but for society's failures as well. As a professional group, school administrators do not have a monopoly on error. There are other professionals who are providing stiff competition in this field.

Since schools are publicly controlled and citizens do not agree on what they want from the schools, controversy is inevitable. There are approximately 1,000 organized groups that are highly critical of public education. Unfortunately, the majority of these are not concerned with the educational plight of the poor or the nature of our testing system—but with communism in textbooks, the lack of God in the classroom, sex education, etc.

Although I look with some skepticism upon recent panaceas offered by social critics of education, nevertheless, these do not upset me. It is naive to expect social critics wishing to make a dramatic change in the system, to do so in a manner that will not hurt or offend the architects of the system that they are trying to change. Yet, neither critics nor educators have a monopoly on wisdom. The danger lies in that the rigidity and complexity of the school establishment, as well as the oversimplification of the obstacles that exist, particularly test results, may lead to the defeat of the very objectives sought by many of the critics of the schools. Certainly social institutions tend to become rigid and the longer they resist change, the greater the confrontation will be. The alternatives seem to be among those who are inflexible to any change, those who are anxious to join citizens and other processionals in redesigning social institutions so that they may serve people more effectively, and third, those who believe that you have to bury the institution completely or topple it and start anew. Those who wish to oversimplify must recognize that:

1. Certainly there are students who fail, due to the substandard performances that educators expect of them, but it is cruel to both parents and children to fix the total responsibility upon that single factor.

2. A desegregation plan that works in the community with 15 per cent Negro students is meaningless in a large city with 60 per cent black students.

3. Over 40 per cent of Detroit's teachers and 26 per cent of our administrators are black. This is educationally sound, yet it will take

more than the mere replacement of white by black principals to prove educational achievement in our testing programs.

4. There is obviously a need for overhauling our schools to bring about greater participation and greater decision-making on the part of parents. However, their influence upon educational achievement is dependent upon a jointly developed process, rather than upon a blueprint presented either by citizens or school administration. School-community participation is a philosophy rather than a program or a blueprint. The nature of the program should be determined by its participants: teachers, administrators, parents, boards of education, and possibly high school students. The process should provide for flexibility, experimentation, involvement and certainly joint evaluation that will lead to innovation and improvement.

Due to the frustrations in the area of desegregation, as well as the shortcomings on the educational front, there arose all about us a national sense of urgency, particularly in the black community, about the achievement scores on national tests of black children.

I share this sense of urgency and recognize the historic basis of the black community's grievance in education, both public and private. As I understand black consciousness in America today, it seeks to cast aside dependency and to establish a sound, viable base upon which the black community can best function to meet its needs. As a school administrator who lives with reality 24 hours of the day, I recognize this approach as an essential element of the free society. Healthy coalitions will come only when black and white approach one another as equal partners in quest of a common cause, I want our schools to augment this partnership with understanding and courage.

Our high school study commission of 1968, composed of citizens and high school students, stated:

> It is the belief of the high school study commission that the era of citizen support and confidence in public schools which has been based on blind faith in the professional educator, has ended . . .

Then, the report goes on to state:

> . . . What can a public school system do? Does it wait for the political structure of the city, state and nation to move to correct the massive problems of the ghetto, of housing, of underemployment and unemployment, of discrimination? They act now and provide the leadership for change.

To illustrate the impact and relevance of the testing program in large cities, let me remind you that in the recent Hobson vs. Hansen suit, in the District of Columbia, Judge Skelly Wright devotes 40 of his 180-page decision to the issue of testing in large cities. Obviously, he is not as much concerned with the nature of the tests, as with their use in sorting students for the so-called tracking system that existed in Washington, D.C. schools. Nevertheless, listen to one or two excerpts from that decision:

> Although both advantaged and disadvantaged children can experience test anxiety . . . the disadvantaged child—and particularly the disadvantaged Negro child—tends to be under much greater psychological stress in the testing situation and thus is more likely to show the effects in test performance . . .

Here is another quote:

> . . . in general, the middle and upper class child is made aware of the importance and value of school and testing; this will make him take both more seriously in terms of his goals in life. The lower class child, and especially a Negro facing the fact of racial discrimination, is more likely to view school and testing as a waste of time. Those grown accustomed to lower horizons may find it hard to take seriously such things as aptitude tests . . .

The Judge concludes that the national median norm is a reasonably accurate statistical statement for the average white American student, and then he goes on to state:

> When standard aptitude tests are given to low income Negro children who are disadvantaged children, however, the tests are less precise and less accurate—so much so that the test scores become practically meaningless. Because of the impoverished circumstances that characterize the disadvantaged child, it is virtually impossible to tell whether the test scores reflect lack of ability—or simple lack of opportunity. Moreover, the probability that test scores of the Negro child or the disadvantaged child will be depressed because of somewhat unique psychological influences further compound the risk of inaccuracy.

Justice Wright's conclusion is:

> In light of the above evidence regarding the accuracy of aptitude test measurements, the court makes the following findings. First, there is substantial evidence the defendants presently lack the

> techniques and the facilities for ascertaining the innate learning abilities of the majority of the district school children. Second, lacking these techniques and facilities, defendants cannot justify the placement and retention of these children in lower tracks on the supposition that they could do no better, given the opportunity to do so.

I am not passing judgment on the quality of the opinions—but I stress these since testing is no longer an isolated professional tool. It has become a public instrument for evaluating educational programs.

As a result of testing, large cities have stressed the term "accountability". To the average dissatisfied or frustrated parent, accountability can be measured very simply. He says—"You have a national test, give it to our children at the beginning of the school year, and at the end of the year, give the test again. If the youngster has not made a year's progress during that year, then obviously the administration and the teacher are not accountable."

In one of his recent essays, Professor Heschel says:

> All that is creative in man stems from the seeds of endless discontent. New insight begins when satisfaction comes to an end and when all that has been said and done looks like distortion.

In the field of testing more than ever, the educational profession needs this seed of discontent. Testing implications for administrators are obvious:

1. We need more effective tests to achieve educational improvement.
2. Principals and teachers mus use these test findings more effectively for guidance purposes—and not as judgmental tools.
3. Better interpretation of testing must be shared with students and parents.
4. Testing must be used as a foundation for improving our total educational program.
5. Evaluation must become a more integral part of our total program. Our Board of Education has approved the establishment of an evaluation department—separate from our existing departments—completely independent—and geared to be an assessment department, rather than a line service agency.

In 1920, only 20 per cent of 17-year-olds attended public schools in Michigan. Today nearly 80 per cent of 17-year-olds are in school. Most modern European countries probably range from 20 to 35 per cent in that age bracket. America is engaged in an adventure which is revolu-

tionary in nature—to provide quality education to the masses of our people. The quantitative aspect of our goals has only recently been achieved. To achieve the qualitative ends of our goals we must act with hope, with determination and with boldness. It is a task that we cannot do alone, the contribution that Dr. Tyler has made today, as well as his lonely, but courageous struggle for national assessment, will, I think, in the coming decades redirect testing from its present state. Testing should serve not as a barometer for initiating targets open for attack —but as a program for improving and achieving our educational goals.

IMPACT OF TESTING ON COUNSELING

ROBERT LUNDY, *Director of Guidance*

Portage (Mich.) Central High School

At one point in the planning, I wished that the topic had been inverted so that it could read, "the impact of counseling on testing." I think there have been some significant and obvious influences that counseling theory and counseling practices have cast upon testing. One immediate example is the current interest in developing tests that will measure what a child has learned, not in comparison to other children of his same age or grade, but rather in terms of how far he has progressed in his mastery of the learning task, or in terms of how apt he is in relation to the requirements of the task, or in terms of the amount of time needed to achieve the mastery. One of my colleagues, a philosopher-type with whom I shared some pre-thinking, suggested that I go ahead and talk about the impact of counseling on testing; he said it amounted to the same thing as talking about the impact of testing on counseling. Well, I don't always listen to this friend; I asked him one day if he was having trouble making up his mind, and he responded, "Yes and no." That is why I decided not to "chicken-or-egg" this topic to death, and we'll stick with the original assignment this morning.

The impact of testing on counseling is difficult to appraise, and not as obvious as when we turn the topic around. I think you can agree with me about that if you are thinking about counseling as we think about it. We don't want to get lost in definitions of counseling, and we could lose sight of our topic. However, for our purposes here, we need to limit counseling to its basic goals, and stay with the aspects of relationships and processes that characterize professional counseling services. The ASCA Statement of Policy for Secondary School Counselors states that, "Counseling is concerned with promoting the pupil's self-understanding and self-acceptance, facilitating personal decision-making and planning, and the resolving of special problems. Counseling can be characterized as a confidential, accepting, non-evaluative, permissive, face-to-face relationship, in which the counselor uses his professional knowledge and competencies to assist the pupil to resolve better those problems and issues which he would normally resolve less satisfactorily without counseling assistance." I need only remind you who are practitioners of this art that counselors do other kinds of things than this, some related to this main task, and others far afield. We all get confused at times in terms of priorities, expectations, pressure, and we need to be reminded every

once in awhile what our main responsibility is. Counseling is so different an activity, so unique as a relationship, so unusual a process in our society which is often organized around quite opposite goals and premises. A young lady returned to her counselor the day following an intensive session, and said, "Hey, you didn't tell me what to do; you didn't tell me what was the right and wrong thing to do." The counselor inquired if that was what the girl expected the counselor to do, and the girl replied, "Why not, everybody else does!" Now this is the kind of framework we are going to use to talk about testing and its impact on counseling.

At this point we perhaps should say that testing seems to have more impact upon the other activities that counselors engage in than it does on counseling per se. The ASCA Statement, already referred to, lists ten professional responsibilities for the counselor, all of them derived from the perspective of students' needs. Among the non-counseling services, it is easy to see that testing plays an important part in forming one of the chief sources of information about the abilities, aptitudes, interests, achievements, attitudes, and values of the students. We are referring to such services as pupil appraisal, educational and occupational planning, referral work, placement, local research, and providing help to parents. We should not overlook the productive area of staff counsulting where test data is most useful in helping teachers to understand students, organizing effective teaching and guidance activities, and getting at the characteristics and needs of the pupil population as these may apply to curriculum development and employment trends in the community. What we are saying here is that testing has had tremendous impact upon many of the activities and services of the professional counselor. However, its impact upon his chief service, that of counseling, again seems not to be as clear.

This leads us then to another consideration, and that is that testing may have had its impact upon the student before he arrives for counseling. Very often, the communicating and interpreting of test scores does occur in a setting other than counseling. Group procedures are commonly used to explain the purposes of testing, to identify the specific tests used, and to introduce students to the norm groups with which they will be compared and the types of scores to be used in the interpretation. Dr. Tyler has already presented the general tone of students' negative attitudes about some testing. In addition to this, there is a tendency on the part of some students and some counselors to feel that the test scores in hand are correct if they are sufficiently high, but if the test scores do not meet some preconceived level, then they are wrong or something went wrong with the testing situation.

Among the number of research studies that deal with the influence of test scores on the student's self-concept and aspirational level, there is one that may typify the general nature of these findings. Goslin and Glass[1] carried on a four year study to investigate the social consequences of standardized ability testing in American society with nearly 10,000 representative students. The most interesting aspect of this study is that the higher the reported score on an intelligence test, the higher the student's estimate of his own intelligence, and the higher his educational aspirations. Most pertinent to counseling was the finding that high self-estimators tended to have high educational aspirations even when the measured intelligence is something different. Goslin and Glass were unable to say which tendency affected the other, or which follows the other. We are all aware, I'm sure, that it is not the scores themselves that are important, but the counselee's perceptions of them, and that they must be communicated at a level that is meaningful to the counselee.

In this regard, I have to tell you about the father I saw recently. He was telling me that his second son, the one about whom the interview was held, was as intelligent as an older son, and a psychologist had assured him of that. Before he went on with his story, I inquired about his own perceptions here, and asked what level of intelligence he was told that his second son had shown. "I don't remember," he said. To help him, I asked if it were average or below average. "Gee, I think he said 130; would that be about right?" When I stated that that would be a very bright boy, he then replied that that was too high, that he had the wrong number.

It would be a mistake not to make some mention of counseling theory, if only to recognize that theory does have much to do with how the counselor views testing and counseling. How the counselor develops his theory about counseling in the first place is an interesting study; but let us only say here that testing in the counseling process is viewed in different ways because of one's theoretical position, however it may be arrived at. Meyering tells us in his monograph[2] that some counselors feel that testing disturbs the counseling relationship and interferes with the release of growth within the counselee, and that the use of tests casts the counselor into the role of an authority figure, and promotes counselee dependence upon the counselor or upon the tests.

When the test scores disturb the relationship or keep it from develop-

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[1]David A. Goslin and David C. Glass. "The Social Effects of Standardized Testing in American Elementary and Secondary Schools," *Sociology of Education,* XL:2 (Spring, 1967), 115–131.

[2]Ralph A. Meyering. *Uses of Test Data in Counseling.* Boston: Houghton-Mifflin Co., 1968, 6–7.

ing, the problem is likely to be one where the counselee focuses on the test results because they may be safe to talk about, keeping the focus off of himself or some guarded problem. Furthermore, test scores appear to be concrete and specific and therefore give substance which the problem area may well appear to lack completely. The difficulty is not with the test scores, however, but with the parties using them. When the test scores cast the counselor in an authoritarian role and create a dependency situation, this might be a comfortable role for the counselor, or the counselee may be overloading the test scores in terms of meaning. The difficulty here is likely to be one of thinking that the test scores say more than they really were designed to say, or even going to the extreme of assuming that test scores can make decisions for people. Again, the problem is with the counselor or with the counselee, and not with the tests themselves. If the client shows undue dependency upon test scores, or upon the counselor through test scores, that is a behavioral characteristic where counseling per se might well focus.

To bring our topic back to full circle again, let us say that to talk about the impact of testing on counseling makes too strong a case. If we can consider the *interplay between* testing and counseling, we are getting nearer to the reality of the matter. Dr. Goldman supports this kind of realationship in the second chapter of his book, *Using Tests in Counseling*[3]. He uses the rubrics of non-counseling and counseling uses of tests. With the latter division, Goldman lists the following uses: 1) pre-counseling diagnostic information to help the counselor to decide whether the client's needs are within the scope of his services; 2) information for the counseling process itself, and to aid the client in developing more realistic expectations about counseling; 3) information relating to the client's post-counseling decisions, including information about himself in relation to the facts about an occupation or an educational program (suggestion or identification of possible courses of action; evaluation of two or more alternatives; testing the suitability of a tentative choice, plan, or decision; self-concept development and clarification). With these kinds of guides for this interplay between testing and counseling, we all need to be aware of the limitations of tests; we all need to recognize our own limitations in the use of tests; and we all need to read again Womer's article, the one entitled, "Testing Programs—Misconception, Misuse, Overuse."[4]

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[3]Leo Goldman. *Using Tests in Counseling*. New York: Appleton-Century-Crofts, 1961, 22–29.

[4]Frank B. Womer. "Testing Programs—Misconception, Misuse, Overuse," *Michigan Journal of Secondary Education*, II (Spring, 1961), 153–161.

Dr. Tyler concluded his remarks this morning by stating that tests and their results can be a helpful resource. I would add only that in this interplay between testing and counseling, both can develop together as significant services to the people for whom we have concern.

IMPACT OF TESTING ON INSTRUCTION

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Before one is able to address himself to any topic, it is necessary to define the terminology that he will employ. For the purposes of this presentation, we are concerned primarily with the definition of instruction. "Instruction" has a variety of definitions, depending upon whether you are looking at it from the teacher's or pupil's perspective. For the teacher, instruction is usually considered in terms of teaching—the process, methods, techniques, products. For the pupil, instruction is normally conceived as being synonymous with the learning process. Hence, it should be readily obvious that testing can have an impact for *both* teacher and pupil. Unfortunately, in the past, too much emphasis has been placed on evaluating the pupil. Not enough emphasis has been placed on using evaluation to help the teacher.

Testing in itself is meaningless and useless unless it can be related to the instructional process regardless of the manner in which we may define instruction. Testing is an integral part of the evaluation process and for this reason, it might be well to spend a few minutes on the functions, or goals, or objectives of evaluation. The specific functions of evaluation are listed below, albeit briefly:

1. Evaluation should be such that the pupil is made aware of his progress. Unless the pupil knows how well or how poorly he is performing, it will be very difficult for him to improve his level of performance, to motivate him to do better (if this is needed), or to assist him in the correction of his errors.

2. Evaluation should appraise the teacher of his own progress. Too frequently, teachers look upon evaluation as a one-way street—the pupil's road—and interpret all learning difficulties as having their origin and/or prime raison d'etre in the pupils. In other words, the eighth grade algebra teacher who is attempting to instruct his class in the solution of a verbal-type problem is frequently prone to interpret pupil learning difficulties as deficiencies in the pupils rather than problems of or in the instructional method.

3. Evaluation should provide the student with a frame of reference—a bench mark, if you wish—as to what is expected of him.

4. Evaluation should motivate (NOT frustrate) the student.

5. Evaluation should assist school people in the formulation and clarification of realistic educational goals and experiences.

6. Evaluation should be used as the dependent variable in conducting research in the learning process.

As mentioned earlier, testing is an integral part of the instructional and learning process. Also, I reiterate that instruction is a two-way street for both tutor and tutored. As seen from the above description of the functions of evaluation, the major goals are equally divided between teacher and student.

It is nearly impossible to separate evaluation from learning. Evaluation is an integral part of learning and is one of the techniques one can use to determine the effectiveness of learning. With this in mind, the question that we are concerned with here is not *does* testing have an impact on instruction, but rather, *should* testing have an impact on instruction? It is my adamant, sometimes dogmatic, but always humble opinion that testing not only should but MUST have an impact on instruction. If this is not the case, teachers should not test their pupils. Teachers cannot and should not behave like the ever-changing chameleon. Teachers must not use the results of tests only to evaluate the learning process that has transpired in their pupils. Teachers are humans—humans are fallible—and because of this they must exercise introspection and carefully evaluate their instructional procedures. If teachers use the results of tests—whether they be standardized survey batteries, single subject-matter tests, or locally constructed tests—solely to make decisions concerning their pupils, they are misusing tests. Tests do not make decisions! And yet, we would be appalled to hear how tests are misused. Humans (you and I) must remain accountable for our decisions—be they for promotion, selection, classification, grouping, hiring, firing, and so forth—for we are the final decision-maker. Tests and testing can help us in making meaningful decisions. They should be used to guide us in our decision-making process. However, they should not be considered as a substitute for the human element involved in the solution of our problems.

You may recall that earlier I mentioned that evaluation can contribute to formulation of, or modification in, our learning objectives. Naturally, in this time of controversy of Federal control of the curriculum, it would not be unexpected for you to be wary of tests and testing. Dr. Tyler mentioned that there are some instances where tests often define the school's objectives. Now I ask you these questions and request that you reflect upon them:

1. Do we have a national set of goals or objectives in our schools that are accepted and agreed upon? If testing could assist us in arriving at a common set of goals (I am not stating here the method in which these goals are to be achieved nor am I implying that all goals would be acceptable) would this be bad?

2. If some schools do not have some general set of goals that they are trying to develop; OR, if the goals that are to be achieved are too general, too grandiose, or too ethereal, or too specific, or too subjective to be measured; OR, if the goals to be achieved are non-existent but vary from teacher to teacher; and tests help remedy some of these defects, is that bad?

3. If tests, (and really I mean the results of tests) can assist the teacher in becoming a better teacher and/or the pupil in becoming a better student, is that bad?

4. If tests can help motivate both pupil and teacher to obtain maximal benefits from the learning experience, is that bad?

There are many critics of testing who claim that tests in general, and achievement tests in particular, tend to control teaching, the classroom program, the content, the methods, and the instructional and administrative practices. Those who are anti personality and other affective tests claim that asking students about their opinions, beliefs, attitudes, and values contribute to the Invasion of One's Privacy. I will not disagree with these latter critics, because in part they are correct. But, research has indicated there is some relationship between learning and affective characteristics. For this reason, I feel that at times it is permissible and even advisable to gather this type of information if we are truly concerned with providing optimal learning conditions. Should one not subject himself to a tuberculin test because the test is designed to indicate whether or not one has TB?

It is true that testing *might* control the curriculum. It is true that in some instances tests have controlled the curriculum. However, it has not been the tests, or their results, per se, that have done this! Humans using, or I should say "misusing" test results have created this dilemma. For those who are suspicious of tests and feel that in the end they will lead to a national curriculum, let me offer the following story. "Changing a curriculum (or trying to change a curriculum) is analogous to trying to move a cemetery. You never know how many friends the dead have until you try to do it."

From my preceding remarks, it should be readily obvious that I feel strongly that not only can tests have an impact upon instruction but that

they *should* have an impact upon instruction. However, in order for tests to be beneficial to all concerned, it is vital that they have or exhibit certain properties. If the impact of tests on learning is to be maximally desirable, the test must be well-conceived and must display in its selection of questions, in clarity, and in appearance, the procedures, habits of mind, and goals which the student is expected to achieve. Poor tests are poor learning experiences. Poor tests can only contribute to unwarranted criticism of the educational product of American schools.

The research which has already been conducted to study the relationship between academic aptitude, or IQ and academic performance has vividly demonstrated that only about 50 per cent of the variation in grades can be accounted for in terms of academic aptitude. Where is the remaining 50 per cent? I feel that in the long run, habits, opinions, beliefs, interests, and values of the student coupled with his IQ will determine the quality of his future contribution to society more than will grades. Now, instead of lining up on two opposite sides of the floor, let us marshall our collective force so that we can provide a learning experience that is most beneficial to all our students! Let's get together and provide information to school personnel that will permit them to provide the best type of education for our students! TESTS CAN HELP US ACHIEVE OUR GOAL OF PROVIDING OPTIMAL LEARNING CONDITIONS!